Claims:

1. (After amendment) A numerical control drive system having two or more drive units consisting of a servo drive unit for driving a motor, a spindle drive unit, etc., a numerical control unit for outputting a control command for driving the motor to said two or more drive units, and a motor drive power converter for converting AC power supplied from an AC power supply into DC power and supplying the DC power to said two or more drive units, characterized in that said motor drive power converter comprises input current detection means for finding an input current of the AC power supplied from the AC power supply, input current determination means for comparing the input current found by the input current detection means with an allowable current value with respect to less-than, equal-to, or greater-than relation, and control signal output means for inputting at least either motor drive currents or motor speeds from said two or more drive units to which the DC power is supplied, selecting the drive unit providing a large effect of lowering the input current, and outputting a control signal thereto if the input current determination means determines that the input current is greater than the allowable current value, that said drive unit comprises control signal execution means for changing the control command from said numerical control unit based on the control signal output from the control signal output means, and that

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the control signal execution means of said drive unit
inputting the control signal changes the control command from
said numerical control unit, thereby lowering the input current.

2. The numerical control drive system as claimed in claim 1
wherein if the input current determination means determines
that the input current is greater than the allowable current
value, the control signal execution means performs processing
of lessening the inclination of a speed command.

3. The numerical control drive system as claimed in claim 1
wherein if the input current determination means determines
that the input current is greater than the allowable current
value, the control signal execution means shuts off gates of
switching elements of said drive units.

4. The numerical control drive system as claimed in claim 1
wherein if the input current determination means determines
that the input current is greater than the allowable current
value, the control signal execution means clamps a speed command.

5. The numerical control drive system as claimed in claim 1
wherein if the input current determination means determines
that the input current is greater than the allowable current
value, the control signal execution means clamps a motor drive
current.

6. The numerical control drive system as claimed in claim 1
wherein said motor drive power converter comprises phase
detection means for detecting a power supply phase of the AC

power and the input current determination means inputs the power supply phase detected by the phase detection means and compares the input current with the allowable current value with respect to the less-than, equal-to, or greater-than relation in the proximity of the power supply phase where the input current changes in direction.

7. (After amendment) The numerical control drive system as claimed in claim 1 wherein said motor drive power converter comprises cumulative-sum-of-times retention means for retaining the cumulative sum of times the input current determination means has determined that the input current exceeds the allowable current value, and alarm determination means for outputting an alarm to said drive units and said numerical control unit if the cumulative sum of times retained in the cumulative-sum-of-times retention means becomes equal to or greater than a reference value.

8. (After amendment) The numerical control drive system as claimed in claim 1 wherein said motor drive power converter comprises input current output means for outputting the input current found by the input current detection means to said numerical control unit.

9. (Deletion)